CLAIMS

1. An electric compressor comprising:

a single-phase induction motor formed of a stator and a rotor;

a compressing mechanism driven by the motor; and

a hermetic container for accommodating the motor and the compressing mechanism and for pooling lubricant,

wherein the compressing mechanism includes:

a shaft having a main shaft and a sub-shaft;

a cylinder for forming a compressing chamber; and

a bearing for supporting the main shaft,

wherein the shaft includes:

a centrifugal pump opening into the lubricant;

a forward leading groove engraved on an outer wall of the main shaft, and having a first end communicating with the centrifugal pump and a second end communicating with an annular lubricant groove provided on an upper end of the bearing;

a reverse leading groove having a lead directing in an opposite direction to that of the forward leading groove, a first end communicating with the centrifugal pump, and a second end directly opening to the annular lubricant groove; and

a vertical hole bored in the sub-shaft and having a first end communicating with the annular lubricant groove, and a second end opening into the hermetic container.

2. The electric compressor of claim 1, wherein the reverse leading groove of which first end communicates with the centrifugal pump via a thinner

section formed at an intermediate section of the shaft.

3. The electric compressor of claim 1 or 2, wherein a cross sectional area of the reverse leading groove is smaller than that of the forward leading groove.

4. The electric compressor of claim 1 or 2, wherein a lead of the reverse leading groove is greater than that of the forward leading groove.

5. The electric compressor of claim 1, wherein the vertical hole slants with respect to a shaft center of the main shaft such that an upper section of the vertical hole slants outward.